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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/840,736	04/23/2001	Luosheng Peng	10480-014-999	4531
7590 09/21/2004			EXAMINER	
ROXANA H YANG P O BOX 400 LOS ALTOS, CA 94023			MANIWANG, JOSEPH R	
			ART UNIT	PAPER NUMBER
			2144	

DATE MAILED: 09/21/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/840,736

Applicant(s)

PENG, LUOSHENG

Examiner

Joseph R Maniwang

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 June 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 April 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 06/26/01.

- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Drawings

1. The drawings are objected to because Fig. 17, 18, and 20 are informal drawings containing hand-drawn reference characters. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Double Patenting

2. Claims 1-18 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-36 of copending Application No. 09/841,777 (U.S. Pat. App. Pub. 2002/0178178). Although the conflicting claims are not identical, they are not patentably distinct from each other because the present claims are directed towards a method and system for receiving a request to access data, downloading the data from a server, calculating a cache benefit index for the data, determining available free space for caching the data, caching the data according to the available free space and cache benefit index, and transmitting the requested data (see present claim 1), while the copending claims are directed to a similar method and system for intelligently caching data on a gateway, comprising the steps of calculating a cache benefit index for the data, and caching the data based on the cache benefit index (see copending claim 1). Common to both sets of claims are the provisions for receiving a request to access the data, downloading the data from a server (see copending claims 5-7 and 9), calculating a cache benefit index for the data (see copending claim 1), determining the available free space in a local file system (see copending claim 2), caching the data according to the available free space and cache benefit index (see copending claims 1 and 2), saving metadata (see copending claim 1), and sending a response to the requestor (see copending claim 6, compare to present claim 1). Additionally, the provision for parsing a response for a broadcast message, updating a database, and sending a broadcast response were commonly disclosed (compare copending claim 8 with present claim 4). Lastly, the provision for comparing the cache benefit index to other cache benefit indices associated with cached data was

commonly disclosed (compare copending claims 3 and 4 with present claim 6). In short, artisan supplied with the claims of copending Application No. 09/841,777 would have been able to construct the presently claimed invention and its various embodiments with nothing more than ordinary skill in the art and the enabling disclosure of Application. No. 09/841,777.

3. This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 4 and 13 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
5. Claim 4 recites the limitation "said mobile database". There is insufficient antecedent basis for this limitation in the claim.
6. Claim 13 recites the limitation "said mobile database". There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

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A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

8. Claims 1-18 are rejected under 35 U.S.C. 102(e) as being anticipated by Adrangi (U.S. Pat. No. 6,651,141), hereinafter referred to as Adrangi.

9. Regarding claims 1 and 10, Adrangi disclosed a method and system for caching files, comprising receiving requests for files and downloading the files from a server if not in the cache (see column 1, lines 23-54; column 5, lines 36-55), calculating a popularity value for the files (see column 6, lines 6-29), determining the available free space on the local cache (see column 6, lines 4-5), caching the files according to the calculated popularity value (see column 5, lines 45-51), recording metadata and request history in a database (see column 5, lines 36-40), and returning the requested files stored in the cache (see column 2, lines 45-52). While not specifically disclosing the exact claim language of "cache benefit index", the claims as presented do not provide details concerning this broad limitation and is read upon by the disclosed "popularity value" of Adrangi.

10. Regarding claims 2 and 11, searching a storage table in a database for determining whether requested files were cached was implicitly disclosed by Adrangi, as it was disclosed that after deciding a set of files was cacheable, an update signifying such caching was made to a database for use in tracking the distribution of the files throughout the system and to reflect content changes (see column 7, lines 19-29;

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column 8, lines 42-49). Such a table signifying the contents of the cache would clearly have served the purpose of keeping a record of whether a file was pre-loaded in the cache. Additionally, Adrangi disclosed searching a cache contents for matching files as known in the art (see column 1, lines 36-45).

11. Regarding claims 3 and 12, Adrangi disclosed communicating with a remote server for obtaining requested files (see column 8, lines 41-46).

12. Regarding claims 4 and 13, Adrangi disclosed updating a database in accordance to a response from a server (see column 8, lines 41-49), in which parsing the server response and sending a response as claimed are inherent in communicating with a server.

13. Regarding claims 5 and 14, Adrangi implicitly disclosed marking cached files as out-of-date as when updating the database after a server response, entries could be marked as aged (see column 7, lines 30-32) signifying that the file requested was less popular, and thus dated (see column 7, lines 30-53).

14. Regarding claims 6 and 15, Adrangi disclosed comparing the calculated popularity value to other popularity values of cached data, determining the available space in the cache, and removing cached items whose popularity values were less than the popularity value of another file (see column 6, lines 1-5; column 7, lines 54-66; column 8, lines 25-30).

15. Regarding claims 7 and 16, Adrangi disclosed caching files based on available space (see column 6, lines 1-5), and further based on if the popularity value of the files

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was greater than a tolerable threshold (see column 7, lines 30-53; column 8, lines 30-40).

16. Regarding claims 8 and 17, Adrangi disclosed the ability to calculate the available cache space after caching files into the local cache (see column 7, lines 7-18; column 8, lines 15-28).

17. Regarding claims 9 and 18, Adrangi disclosed performing various management sub-transactions as claimed, including cache space management (see column 7, lines 7-18; column 8, lines 25-30) and management of communications (see column 5, lines 11-35).

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Defouw et al. (U.S. Pat. No. 6,742,084) disclosed a caching method for selecting variable size data blocks for replacement or removal from a cache.

Perincherry et al. (U.S. Pat. App. Pub. 2002/0087798) disclosed a method and system for selectively caching database objects based on a calculated cache-worthiness value of the objects.

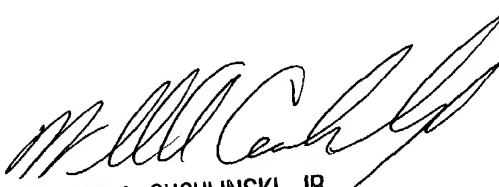
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph R Maniwang whose telephone number is (703) 305-3179. The examiner can normally be reached on Mon-Fri 8:00-4:30.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William A Cuchlinski can be reached on (703)308-3873. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JM



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